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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,350	12/20/2000	Janet Doong	2204/A44	9258
2101	7590	12/19/2003	EXAMINER	
BROMBERG & SUNSTEIN LLP 125 SUMMER STREET BOSTON, MA 02110-1618			BARQADLE, YASIN M	
			ART UNIT	PAPER NUMBER
			2153	

DATE MAILED: 12/19/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/747,350

Applicant(s)

DOONG ET AL.

Examiner

Yasin M Barqadle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

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DETAILED ACTION

1. Claims 1-11 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Ciotti, Jr. et al US (6421731).

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As per claim 1, Ciotti et al teach a method for synchronizing a route change in a routing table with a plurality of multicast routing protocols in a network device in a communication network device, the method comprising (fig. 1 and 2):

assigning a route ID value to each route in the routing table [col.5, lines 11-21];

assigning a bookmark in a route change queue to each multicast routing protocol, the bookmark having a value equivalent to the route ID value of the last route processed by the multicast routing protocol [each entry in the routing table includes a route change (RC) field which is set when a new route is added or an existing route is changed col. 5, lines 27-45];

assigning a new route ID value to each route changed in the routing table [for each route change there a new route entry col. 5, lines 11-52 and col. 12, lines 33 to col. 13, line 27];

storing each route changed in the route change queue [col. 5, lines 11-45]; and

comparing the bookmark value of each multicast routing protocol to the highest route ID value in the route change queue [col. 5, lines 11-45 and col. 16, lines 49 to col. 17, line 29].

As per claim 2, Ciotti et al teach the method according to claim 1, wherein the route change is the addition of a new route to the routing table [col. 7, lines 18-40].

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As per claim 3, Ciotti et al teach the method according to claim 1, wherein the route change is the deletion of a route from the routing table [col. 10, lines 45-65].

As per claim 4, Ciotti et al teach the method according to claim 1, wherein the route change is updating a route in the routing table [col. 7, lines 18-40].

As per claim 5, Ciotti et al teach the method according to claim 1, 11-urther including processing routes in the route change queue with route ID values greater than the bookmark value of the multicast routing protocol [col. 5, lines 11-45; col. 6, lines 41 to col. 7, line 45 and col. 16, lines 49 to col. 17, line 29].

As per claim 6, Ciotti et al teach a route entry for a route in a routing table for a plurality of multicast routing protocols, the route entry comprising (fig. 1 and 2):

- an address for the route source network [col. 5, lines 21-25];

- an address for the next hop of the route [col. 5, lines 21-25];

- an address for the next hop interface of the route [col. 5, lines 11-25];

- a route state value for indicating the current state of the route [col. 5, lines 37-45 and col. 10, lines 26-45];

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a routing protocol identifier for identifying the routing protocol associated with the route [col. 12, lines 34-67 and col. 6, lines 41 to col. 7, line 45]; and

a route ID value for determining when the route entry has been processed by each of the plurality of routing protocols [col. 5, lines 11-45; col. 6, lines 41 to col. 7, line 45].

As per claim 7, Ciotti et al teach a computer program product for use on a computer system for synchronizing a route to change in a routing table with a plurality of multicast routing protocols in a network device in a communication network, the computer program product comprising a computer useable medium having computer readable program code thereon [col. 14, lines 5-10 and col. 22, lines 42-66]: the claim includes similar limitations as discussed in claim 1 above. Therefore, it is rejected with the same rationale.

As per claim 8, Ciotti et al teach the computer program product according to claim 7, wherein the route change is the addition of a new route to the routing table [col. 7, lines 18-40].

As per claim 9, Ciotti et al teach the computer program product according to claim 7, wherein the route change is the deletion of a route from the routing table [col. 10, lines 45-65].

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As per claim 10, Ciotti et al teach the computer program product according to claim 7, wherein the route change is updating a route in the routing table [col. 7, lines 18-40].

As per claim 11, Ciotti et al teach the computer program product according to claim 7, further including program code for processing routes in the route change queue with route ID values greater than the bookmark value of the multicast routing protocol [col. 5, lines 11-45; col. 6, lines 41 to col. 7, line 45 and col. 16, lines 49 to col. 17, line 29].

Conclusion

3. The prior made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yasin Barqadle whose telephone number is 703-305-5971. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 703-305-9717. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-746-7238 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Yasin Barqadle

December 7, 2003



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